

II. POST-TRIAL INSTRUCTIONS

Introduction

Ladies and Gentlemen of the Jury:

Now that you have heard the evidence and the arguments, I will give you the instructions that will govern your deliberations in the jury room. It is my job to decide what rules of law apply to the case and to explain those rules to you. It is your job to follow the rules, even if you disagree with them or don't understand the reasons for them. You must follow all of the rules; you may not follow some and ignore others.

The decision you reach in the jury room must be unanimous. In other words, you must all agree on the answer to each question.

Your deliberations will be secret. You will never have to explain your verdict to anyone.

If you have formed any idea that I have an opinion about how the case should be decided, disregard that idea. It is your job, not mine, to decide the facts of this case.

The case will be submitted to you in the form of a special verdict consisting of three questions. In answering the questions, you should consider only the evidence that has been received at this trial. Do not concern yourselves with whether your answers will be favorable to one side or another, or with what the final result of this lawsuit may be.

Burden of Proof—Preponderance of the Evidence

When a party has the burden to prove any matter by a preponderance of the evidence, it means that you must be persuaded by the testimony and exhibits that the matter sought to be proved is more probably true than not true. On Question No. 1 in the special verdict, the burden of proof is on Novozymes, which contends that the answer to the question should be "yes." You should base your decision on all of the evidence, regardless

which party presented it.

Burden of Proof—Clear and Convincing

A patent is presumed valid. In answering question no. 2 and question no. 3, you are instructed that the burden is on Danisco to convince you to a reasonable certainty by evidence that is clear, satisfactory, and convincing that the answer should be "yes."

Answers Not Based on Guesswork

If, after you have discussed the testimony and all other evidence that bears upon a particular question, you find that the evidence is so uncertain or inadequate that you have to guess what the answer should be, then the party having the burden of proof as to that question has not met the required burden of proof. Your answers are not to be based on guesswork or speculation. They are to be based upon credible evidence from which you can find the existence of the facts that the party must prove in order to satisfy the burden of proof on the question under consideration.

Interpretation of the Patent Claims

I have previously defined certain phrases in the claims of the '723 patent. You must use these definitions in making your decision. The phrases I have defined are as follows:

"Isolated variant" means "a variant that is sufficiently separated from other material to make the variant easier to recover."

"Increased thermostability" means that the alpha-amylase variant has consistently greater residual alpha-amylase activity than the parent alpha-amylase at any time point at which at least one of the variant or parent alpha-amylase has residual activity.

A "Bacillus stearothermophilus alpha-amylase" means an alpha-amylase "produced

from an alpha-amylase gene of a *Bacillus stearothermophilus* organism."⁶

Person of Ordinary Skill in the Art

Some issues in patent cases are determined by reference to a "person of ordinary skill in the art of the invention," a term that I will use later in these instructions.

The parties agree that a person of ordinary skill, determined as of 2000–2001, would typically have a Ph.D. degree in biochemistry, molecular biology, or a related area, with two to four years of work experience. The person of ordinary skill may alternatively have a Master of Science degree, but must then also possess at least four to eight years of relevant work experience.

In addition, the parties agree that the person of ordinary skill would have experience in recombinant DNA techniques, protein science, and protein engineering. Experience working with recombinant DNA includes an understanding of molecular biology techniques such as making random or specific site-directed alterations to a DNA sequence. Experience in protein science includes knowledge of how to express a DNA sequence in host cells, familiarity with techniques for purifying expressed proteins, and assessing the activity and stability of proteins. Experience in protein engineering includes comparison of protein sequences by sequence alignment techniques, downloading coordinates for protein structures, and viewing three dimensional protein structures using computer-implemented methodologies.

Independent and Dependent Claims

Patent claims may exist in two forms, called independent claims and dependent claims. An independent claim stands on its own and does not refer to any other claim of the patent. A dependent claim refers to at least one other claim in the patent. A dependent

claim includes each of the requirements of the other claim to which it refers, as well as the requirements in the dependent claim itself.

Imagine a hypothetical patent claim for a table that has a tabletop, four legs, and glue to hold the legs and tabletop together. That is an example of an independent claim. In that same hypothetical patent, a dependent claim might be one that stated, "the same table in the initial claim, where the tabletop is square."

Claims 1, 9 and 16 of the '723 patent are independent claims. Claims 2–8 of the '723 patent are dependent claims that depend from claim 1. Claims 10–15 of the '723 patent are dependent claims that depend from claim 9. Claim 17 of the '723 patent is a dependent claim that depends from claim 16.

Infringement

The first question on the verdict form is: "Has Novozymes proven by a preponderance of the evidence that Danisco's whole broth products meet the 'isolated variant' requirement of claims 1-5, 8-13 and 15-16 in the '723 patent?" Note that the burden of proof is on Novozymes.

Written Description

Question No. 2 asks whether Danisco has proven by clear and convincing evidence that the specification for the '723 patent does not contain an adequate written description for each of the claims.

To satisfy the written description requirement, the patent must describe each and every limitation of a patent claim, in sufficient detail, although the exact words found in the claim need not be used. The level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity

and predictability of the relevant technology.

The written description requirement is satisfied if a person of ordinary skill in the art reading the patent application as originally filed would recognize that the patent application described the invention as finally claimed in the patent. The invention must be reduced to practice, "actually" or "constructively." Actual reduction to practice means making an example of the invention. Constructive reduction to practice means describing the claimed invention in a definite way. Either type of reduction to practice is sufficient. In other words, enough detail must be included in the specification to convince a person of skill in the art that the inventor possessed the full scope of the claimed invention as of the filing date, which in this case is November 16, 2000. However, a mere wish or plan for obtaining the claimed invention is not adequate written description.

A requirement in a claim need not be specifically disclosed in the patent application as originally filed if a person of ordinary skill would understand that the missing requirement is necessarily implied in the patent application as originally filed.

Enablement

Question No. 3 asks whether Danisco has proven by clear and convincing evidence that the claims are ^{NOT} enabled.

The law requires that the "specification" section of the patent contain enough information to enable a person of ordinary skill in the art of the invention to make and use each element of the claimed invention, without an unreasonable amount of experimentation. A patent does not have to state information that persons of ordinary skill in the art would be likely to know or could obtain without undue effort.

You may consider the following factors in determining whether the experimentation required is unreasonable: how much experimentation is necessary; how routine the necessary

experimentation is; how much direction or guidance the patent provides; whether the patent contains working examples; the simplicity or complexity of the invention; what is disclosed by the prior art; the level of skill possessed by those in the art at the time the patent application is first filed; the predictability of the art at the time the patent application is first filed; and the breadth of the claims.

Whether a patent specification satisfies the enablement requirement is evaluated from the perspective of one of ordinary skill in the art as of the filing date of the November 16, 2000 application.

Selection of Presiding Juror; Communication with the Judge; Verdict

When you go to the jury room to begin considering the evidence in this case you should first select one of the members of the jury to act as your presiding juror. This person will help to guide your discussions in the jury room.

You are free to deliberate in any way you decide or select whomever you like as a presiding juror. When thinking about who should be presiding juror, you may want to consider the role that the presiding juror usually plays. He or she serves as the chairperson during the deliberations and has the responsibility of insuring that all jurors who desire to speak have a chance to do so before any vote. The presiding juror should guide the discussion and encourage all jurors to participate. I encourage you at all times to keep an open mind if you ever disagree or come to conclusions that are different from those of your fellow jurors. Listening carefully and thinking about the other juror's point of view may help you understand that juror's position better or give you a better way to explain why you think your position is correct.

Once you are in the jury room, if you need to communicate with me, the presiding juror will send a written message to me. However, don't tell me how you stand as to your

verdict.

As I have mentioned before, the decision you reach must be unanimous; you must all agree.

When you have reached a decision, the presiding juror will sign the verdict form, put a date on it, and all of you will return with the verdict into the courtroom.